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14. ABSTRACT Deployment and combat can affect marriage and families negatively. This study will test telephone-based strategies to assist spouses of returning Iraq and Afghanistan service members. The goal is to build spouses' resilience to cope with reintegration challenges, help them serve as a support system for service members, and ease the transition for families post-deployment. The study will compare telephone support/discussion groups to telephone/computer education groups and to usual care. Some of the barriers to participating in an intervention, such as lack of local services, access, childcare, and distances, are eliminated by telephone use. The study enrolled 228 spouses. In the Telephone Discussion groups, a group facilitator and participants will focus on education, skills building and support. Education Only telephone/computer groups will provide the same education content, without skills building or support. Each group will meet 12 times over 6 months. Content includes ways returning service member, spouse and family may have changed during deployment; negotiation; strategies to reduce or eliminate reintegration difficulties; strategies to support the service member; and cues to alert spouses when to seek mental health services for family or self. Usual Care participants will receive a workshop focusing on the same topics after participation.					
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INTRODUCTION:

The consequences of deployment and combat exposure can affect marriage and families negatively. The study will compare telephone support/discussion groups to telephone/computer education groups and to usual care as strategies to assist spouses of returning Iraq and Afghanistan service members. The goal is to build spouses' resilience to cope with reintegration challenges, help them serve as a support system for service members, and ease the transition for families post-deployment. Some of the barriers to participating in an intervention, such as lack of local services, access, childcare, and distances, are eliminated by use of the telephone. The study enrolled 228 spouses. In the Telephone Discussion groups, a group facilitator and participants will focus on education, skills building and support. Education Only telephone/computer groups will provide the same education content, without skills building or support. Each group will meet 12 times over 6 months. Content includes ways the returning service member, spouse and family may have changed during deployment; negotiation in personal relationships; strategies to reduce or eliminate reintegration difficulties; strategies to support the returning service member; and cues to alert spouses when to seek mental health services for the family or themselves. Usual Care participants will receive a workshop focusing on the same topics after their study participation.

BODY:

The SOW is shown below.

Task 1: Develop Manual of Operations (MOP) Months 1-7, October, 2009-April 2010.

All activities and products are completed for the Manual of Operations.

Activities

- Finalize support group format
- Finalize support group materials
- Finalize education group sessions
- Finalize screening materials
- Finalize data collection protocol/battery
- Develop and print brochures and posters

Products

- Support group format, topics and scripts
- Participant Workbooks and Welcome Packs
- Education group format, topics and scripts
- Screening forms and scripts
- Data collection forms, scripts and documentation
- Brochures and posters
- Participant Workbooks and Welcome Packs

Task 2: IRB approval

Months 1-8, October, 2009-May 2010.

All activities and products are completed for IRB approval. Final Memphis IRB approval to add the Educational Only arm was received 5/27/10 and HRPO approval was received on 6/15/10.

Activities

- Develop informed consent documents

Products

- Approved consent

Task 3: Hire and train personnel

Months 1-5, October, 2009-February 2010

Two University of Memphis Psychology graduate student interns worked with the project during the past year.

Activities

- Write job descriptions, interview, hire, train

Products

- Trained and certified staff

Task 4: Recruitment and Randomization

Months 8-39, May 2010-December 2012

One individual was recruited and randomized inappropriately as she did not meet the criteria. Her service member had been in Desert Storm but not OIF.

Activities

- Work with recruitment sources
- Telephone and screen potential participants
- Randomize participants

Current Products

- Recruitment sources contacted
- 321 spouses screened
- 228 participants randomized
- 29 participants discontinued

Task 5: Intervention (Telephone Groups)

Telephone support/discussion groups ended June, 2013.

Months 8-45, May 2010-June 2013

Activities

- Schedule and provide groups for intervention participants

Current Products

- Groups completed

Task 6: Attention Control (Education Groups)

Education webinar groups ended June, 2013.

Months 8-45, May 2010-June 2013

Activities

- Schedule and provide sessions for education participants

Current Products

- Groups completed

Task 7: Data Collection/Data Entry/Cleaning

All data except for remaining 12 month data, which have not been collected, are completed.

Months 8-52 May 2010-January 2014

Activities

- Collect full data at baseline, six and twelve months
- Collect partial data at three and nine months

- Enter and clean data

Current Products

- 228 baselines collected
- 192 3-month follow-ups collected
- 189 6-month follow-ups collected
- 175 9-month follow-ups collected
- 170 12-month follow-ups collected
- 79 project evaluations collected
- Completed data entry and cleaning for baseline, 3-month, 6-month, 9-month, and 12-month data collections and project evaluations

Task 8: Control Group Workshops

Months 20-52, May 2011-January 2014

Activities

- Provide one-one workshops for control group participants

- Products
- Workshops provided

Task 9: Data Analysis

Months 33-52, June 2012- January 2014

Baseline data analysis has begun as shown in Appendix 1.

Activities

- Complete data analysis

Products

- Completed data analysis

Task 10: Preparation and Dissemination of Results Months 31-52, April 2012-January 2014

Manuscripts have begun on service use and intimacy concerns.

Activities

- Prepare papers and presentations

Products

Papers and Presentations

- See Outcomes and Appendix 1

KEY RESEARCH ACCOMPLISHMENTS: See Appendix 1

REPORTABLE OUTCOMES:

Spouse Telephone Support (STS).

The Spouse Telephone Support program, based on the telephone support model used for this study was implemented by the VA for post 9/11 spouses from any medical center. This program began in October 2011. Memphis VAMC staff provide the training, certifying and coaching for VA staff across the 152 facilities to be able to provide the STS program. VA Memphis also supplies the STS Spouse Workbooks. To date, 100 sites have been trained, 177 staff trained.

Presentations (all slides available on request)

Nichols, LO. Caregiving: Research, Translation and Practice. University of Michigan Research Career Development Core Research Retreat, Human Research across the Translational Spectrum: From the Lab to the Real World. Ann Arbor, May 31, 2013.

Nichols, LO. Caregiving: Research, Translation, and Practice. Medical Staff Meeting, VAMC Memphis. September 11, 2013.

Baseline Data

Appendix 1 shows beginning work on two manuscripts based on baseline data analysis, focusing on support service use and intimacy concerns.

CONCLUSION:

REFERENCES and SUPPORTING DATA: N/A

APPENDICES:

1. Baseline data information
2. Quad Chart

Preliminary Data Analysis Results, Spouse READI (Resilience Education and Deployment Information): Randomized Clinical Trial, W81XWH-09-1-0242
Support Service Use and Intimacy Concerns
October, 2013

Since recruitment ended, two different baseline analyses have begun in preparation for manuscripts: a quantitative analysis of counseling and support service use for spouses and service members, and a qualitative analysis of intimacy concerns.

Sample.

As shown in Table 1, spouses/significant others were predominantly women in their middle 30s. They had been married or living together approximately 10 years and have 1.6 children. They were well educated with 15 years education, on average, and slightly over half were employed with \$5056 monthly household income.

Table 1. Baseline Characteristics of READI Spouses (N = 227)

Variable	M ± SD or %
Demographic	
Female	98.7
Age, years	36.5 ± 8.6
Years married	9.0 ± 6.9
Years cohabitated	9.7 ± 6.8
Children, number	1.6 ± 1.3
Race	
White	79.3
Black	12.3
Native American	1.8
Asian/Pacific Islander	1.8
Other	4.8
Ethnicity, Latino/a	11.9
Education	15.2 ± 2.1
Employed	55.9
Household income, monthly	5056 ± 2657
Military service	16.3
Training	
Pre-deployment	37.0
During deployment	23.8
Post-deployment	22.5
Clinical	
General health (0-4)	2.4 ± 1.0
Depression (0-27)	6.2 ± 5.3
Anxiety (0-21)	7.6 ± 5.1
Quality Marriage Index (6-45)	33.9 ± 9.0
Social support (0-68) / (12-84)	65.5 ± 12.4
Family communication (0-30)	20.9 ± 5.6
Coping (29-145)	104 ± 13.8
Personal coping (8-40)	32.5 ± 4.7
Family coping (6-30) (n = 156)	26.3 ± 3.2
Social readjustment (0-437)	149.2 ± 79.4
Resilience (0-100)	77.0 ± 10.1

Note: Depression = PHQ-9, Anxiety = GAD-7,
Family communication = FPSC, Social
readjustment = SRRS, Resilience = CD-RISC

Table 2. Baseline Characteristics of READI Service Members (N = 227)

Variable	M ± SD or %
Demographic	
Age, years	38.0 ± 7.9
Employed	75.3
Branch of service	
Army National Guard	33.5
Army	37.4
Marines	7.0
Navy	11.0
Army Reserve	1.3
Air Force	7.5
Air Force Reserve	0.9
Air National Guard	0.9
Naval Reserve	0.4
Class	
Non-commissioned officer	42.7
Commissioned officer	20.3
Senior NCO	20.7
Junior enlisted	7.5
Warrant officer	3.1
Status	
Retired	11.5
Serving in guard or reserve	42.3
Serving in regular military	33.0
Discharged	10.1
Other	3.1
Receive VA services	39.2
Deployment	
Deployments ever, number	3.6 ± 3.0
OEF/OIF deployments, number	2.1 ± 1.3
Previous deployments, number	1.6 ± 2.4
Months since return	21.8 ± 22.6
Months of last deployment	11.1 ± 4.7
Injured	62.1
PTSD severity (17-85)	42.9 ± 20.0
Meets criteria for PTSD Diagnosis	43.6

Their service members were slightly older, late 30s and 75% were employed (Table 2). Slightly more than a third were National Guard or Reserve. The service members had been deployed, on average, four times. Their last deployment lasted almost 1 year and they had been back almost two years. Almost two-thirds were injured. Most common injuries included TBI, PTSD, orthopedic problems with knees, shoulders and backs, chronic pain, and headaches.

Service Use.

The tables below show baseline data relating to supportive service use, defined as counseling or other support services, for the 227 spouses and service members. Not all spouses and service members used supportive services. For spouses, 39.6% were receiving counseling or support services while 50.7% of service members were receiving services. As shown in Table 3, the most common service used was

counseling. As expected, for spouses and service members, number of services used is related (R , Beta = .552, $R^2 = .305$, $p < .001$).

Table 3. Baseline Couple Service Use (n=227)

Service	Spouse (n=90)	Service Member (n=115)	Use N	Use %
Support Group	38	38	76	12.4
Counseling (Individual, Couples, Family, Pastoral)	154	185	339	55.5
A/D Treatment	2	12	14	2.3
Psychotropic Medications	45	77	122	20.0
Online Service	30	16	46	7.5
Other	8	6	14	2.3
Total Use	277	334	611	

Spouse participants

were asked if they were frustrated “trying to find resources to help me with reintegration issues.” For spouses who were frustrated at finding services, 62.2% of their service members were already using counseling and support services compared to spouses who were not frustrated (43.4% of service members using services, $p = .006$). There was no significant association for frustrated spouses, compared to non-frustrated spouses, and their own use of services (37.8% vs. 40.6%, $p = .67$).

Factors Relating to Service Use.

There were two spouse factors relating to baseline service use for both spouses and service members: spouse depression and service member injury causing difficulty or extra care for the spouse.

Comparing spouses who met the criteria for major depression with those who did not meet this threshold, the depressed spouses used significantly more services, as did their service members (Table 4). Clinical significance, as measured by Cohen’s d effect size, was in the medium range.

Spouses were asked if their service member had been injured during deployment and whether that injury or illness caused difficulty in providing care to the service member. Not all service member injuries caused care difficulties for the spouse. A total of 62% of spouses reported that their service member had

Table 4. Spouse Depression and Service Use

	Depressed* Spouses (n=24)	Non Depressed Spouses (n=203)		
	Mean	Mean	<i>p</i> Value	Clinical Effect Size, <i>d</i>
Number of services used, Spouse	2.08	1.12	.015	.53
Number of services used, Service member	2.46	1.35	.006	.60

*Meeting major depression criteria

been injured but only 50% of spouses reported that they were dealing with care difficulties from injuries. The main types of care difficulties included monitoring and managing the service member particularly those with PTSD and TBI, driving to appointments, helping to recover from surgeries, and assistance with medications. Spouses dealing with care difficulties used more services than spouses who

Table 5. Spouses Dealing With Care Difficulty and Service Use

	Care Difficulty Spouses (n = 114)	Non Care Difficulty Spouses (n = 113)		
	Mean	Mean	<i>p</i> Value	Clinical Effect Size, <i>d</i>
Number of services used, Spouse	1.67	0.76	< .001	.50
Number of services used, Service member	2.38	0.54	< .001	1.13

were not, as shown in Table 5. The clinical effect sizes were medium for spouse service

use and large for service member use. Although their service members also used more services, these spouses were more likely to be frustrated in their attempts to find services than spouses not dealing with care difficulties (55.3% vs. 23.7%, $p = .001$). Unsurprisingly, spouses who were dealing with care difficulties, compared to those who were not, were significantly more likely to exhibit major depression (22.8% vs. 12.3%, $p = .037$).

Manuscript Development – Service Use.

This manuscript will be based on the theoretical perspective of the Andersen and Aday behavioral model of service use. The initial behavioral model includes three major categories: (1) predisposing factors (demographic, social structural, and attitudinal-belief variables); (2) enabling factors (family resources and characteristics of the community); and (3) need factors (perceived and evaluated illness).

While the behavioral model of healthcare use provides a general framework for understanding service use, for military and veteran families there may be additional military-specific factors that influence service use or family related factors, such as the role of the spouse in getting services used by other family members, as shown above. The manuscript will also investigate the Andersen and Aday most frequently researched factors available in our data. These include predisposing factors (age, marital status, gender/sex, education, ethnicity/nativity and employment status), enabling factors (income/financial situation), and need factors (mental or physical health status, self-reported/perceived health, depressive symptoms).

Intimacy Concerns

One of the continuing issues during reintegration is a return to intimacy. In qualitative analysis of spouse comments and commitments during group sessions, four main intimacy concerns were identified by spouses. These included: role changes in relationship, communication difficulties, more pressing needs, and physical intimacy concerns. This analysis is ongoing but selected spouse comments are shown below.

Role changes in relationship. Two different roles were identified by spouses as causing difficulty in re-establishing intimacy. The first was the expected – that the couple must become used to each other again. As one spouse reported, it was hard to have “long periods of time together difficult when used to frequent deployments.” The other role change was one related to injuries sustained during the deployment. Since return, the spouse’s role in managing care, ranging from actual physical care to supervision of activities and behavior, had increased. Spouses reported that this was a significant change in the family dynamic, “transitioning back from being caregiver to being wife.”

Communication difficulties. Spouses reported communication difficulties stemming from their behavior and the service member’s behavior. With the increased operation tempo of these conflicts, spouses protected themselves from becoming too dependent on the service member being home. “I am staying independent in preparation for possible future deployments.” At the same time, service members who were struggling with their own difficulties after deployment were not always available to rebuild communication channels. “He spends all his time holed up in his room.”

More pressing needs. Although spouses wanted a return to the relationship the way it had been, injuries incurred during deployment frequently were all encompassing of time and resources. Spouses who were dealing with injuries reported that medical appointments, therapy, and monitoring of medication usage all took away time from intimacy/couple time. In effect, these more pressing needs became the focus in the relationship. “We planned for him coming home or not, we didn’t plan for this.”

Physical intimacy concerns. The resumption of physical intimacy could be slowed by the service member’s struggle to reintegrate back into the family from the combat role, and the couple’s seeking of their equilibrium. “He acts like a different person. We need to relearn each other before intimacy can resume.” In addition to reintegration concerns, physical intimacy requirements and

needs could be changed by injuries. As one spouse reported, I am “learning new ways to resume a sexual relationship with him after injuries.”

Manuscript Development – Intimacy Concerns.

This manuscript will include an analysis of spouses’ baseline comments regarding their perceptions of intimacy and how perceptions changed with strategies used to address intimacy during the support groups.

Quad Chart

Title: Spouse Resilience, Education And Deployment Information: Randomized Clinical Trial
 Proposal ID, Funding Source: W81XWH-09-1-0242, DHP MOMRP



DMRDP

PI : Nichols Org: VA Medical Center, Memphis TN Award Amount: \$1,072,618

Study/Product Aim(s)

- Assess feasibility of telephone support group sessions for post deployment spouses;
- Assess satisfaction;
- Determine whether telephone support groups significantly improve outcomes, compared to educational webinars and usual care

Approach

Randomized clinical trial of 228 spouses, 1/3 in each study arm. Compare usual care, and webinar sessions to more intensive telephone support groups. Each telephone support arm spouse participates in 12 one-hour telephone support groups focusing on education, skills building and support over six months. Each education group spouse participates in online webinars. Full data are collected baseline, 6 and 12 months, outcomes at 3 and 9 months.

A slide from
one of the
READI
Webinars

MENTAL HEALTH AND RESILIENCE

"You are not responsible for being down, but you
are responsible for getting up."
Jesse Jackson

Spouse READI

Funded by Department of Defense and Veterans Affairs
Medical Center, Memphis, TN

Accomplishment: Baseline data in analysis.

Timeline and Cost

Activities	CY	10	11	12	13	14
Finalize manual, obtain approvals, print materials		■				
Recruit subjects			■	■	■	
Administer interventions			■	■	■	
Collect, analyze, process and publish data			■	■	■	
Estimated Budget (\$K)		\$130	\$337	\$341	\$265	

Goals/Milestones

- ☒ Finalized Manual of Operations (MOP) including telephone support group topics and scripts and online education/webinar sessions topics and scripts, screening forms and scripts, data collection forms, scripts and documentation
- ☒ Obtain IRB and HRPO approval
- ☒ Print approved materials, brochures and Workbooks
- ☒ Hire/Train personnel
- ☒ Recruit, enroll and randomize subjects (Goal: 225 spouses)
- ☒ Administer intervention 1 (telephone support groups)
- ☒ Administer intervention 2 (online education/webinar)
- ☐ Collect, analyze and process data
- ☐ Publish data

Comments/Challenges/Issues/Concerns

Budget Expenditure to date

Projected Expenditure: \$1,006,445 Actual Expenditure: \$801,246
 (as of 9/30/13)

Updated: 10 October 2013